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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,266	03/30/2000	Vipin Samar	OR99-17401	8991

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EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/539,266	SAMAR, VIPIN	
	Examiner	Art Unit	
	David E. England	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 – 10, 13 – 22 and 25 – 33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 – 10, 13 – 22 and 25 – 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1 – 10, 13 – 22 and 25 – 33 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 – 5, 9, 13 – 17, 21 and 25 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devarakonda et al. (6424992) (hereinafter Devarakonda) in view of Kunzelman et al. (6041357) (hereinafter Kunzelman) in further view of Davis et al. (6367009) (hereinafter Davis) in further view of Haller et al. (6363363) (hereinafter Haller) and Davis et al. (6282522) (hereinafter Davis, V.).

4. Referencing claim 1, as closely interpreted by the Examiner, Devarakonda teaches receiving a message from the client at a first server n the plurality of servers, the message including a session identifier that identifies a secure communication session with the client, (e.g. col. 3, lines 27 – 55 & col. 4, line 41 – col. 5, line 12); and

5. if the session identifier does not correspond to an active secure communication session on the first server, establishing an active secure communication session with the client on the first server by, (e.g. col. 3, lines 27 – 55 & col. 4, line 41 – col. 5, line 12),

6. attempting to retrieve state information associated with the session identifier for an active secure communication session between the client and a second server from the plurality of servers, wherein the state information includes an encryption key used to encrypt communications between the client and the second server, (e.g. col. 9, lines 5 – 32),

7. if the state information for the active secure communication session is not retrieved, communicating with the client to establish the active secure communication session with the client, (e.g. col. 3, lines 27 – 55 & col. 4, line 41 – col. 5, line 12), but does not specifically teach wherein the state information includes encryption key used to encrypt communications;

8. if the state information for the active secure communication session is retrieved, using the state information including the encryption key to share the active secure communication session established between the client and the second server for subsequent communications between the client and the first server without having to set up a new secure communication session between the client and the first server; and

9. wherein sharing the active secure communication session allows a single SSL session to be simultaneously shared by multiple servers.

10. Kunzelman teaches wherein the state information includes an encryption key used to encrypt communications between the client and the second server, (e.g. col. 1, line 45 – col. 2, line 54);

11. if the state information for the active secure communication session is retrieved, using the state information including the encryption key to share the active secure communication session established between the client and the second server for subsequent communications between the client and the first server without having to set up a new secure communication session between

the client and the first server, (e.g. col. 3, lines 33 – 65, *"session migration"* & col. 4, lines 29 – 63 & col. 5, line 38 – col. 6, line 13, *"session token & authorized request"*). It would have been obvious to one skilled in the art at the time the invention was made to combine the teaches of Kunzelman with Devarakonda because doing so, makes for a faster session between a user and multiple servers by not having to go through the steps of continually creating new session parameters and connection information for the same user accessing different servers.

12. Davis teaches wherein the state information includes encryption key used to encrypt communications, (e.g. col. 2, lines 6 – 64). It would have been obvious to one skilled in the art at the time the invention was made to combine the teaches of Davis with the combine system of Devarakonda and Kunzelman because using a encryption key that is shared ensures that if there is an identical encryption key in queue to be used, it will discarded to ensure that there is only unique encryption keys in use to differentiate form other secure sessions communications between clients and servers.

13. Haller teaches the use of encryption keys used to encrypt communications between the client and the server, (e.g., Figure 4 & col. 16, line 22 - col. 17, line 8, *"public key, private key, random encryption key"*);

14. encryption keys to share the active secure communication session established between the client and the server, (e.g., Figure 4 & col. 16, line 22 - col. 17, line 8, *"public key, private key, random encryption key"*). It would have been obvious to one skilled in the art at the time the invention was made to combine the teaches of Haller with the combine system of Devarakonda, Kunzelman and Davis because adding another encryption key to encrypt data would only further secure the data so only privileged users with the ability to decrypt the data past the initial

encryption can further decrypt the data to utilize what is sent. Furthermore adding more than one encryption key to data is only re-encrypting or duplicating what is already been encrypted, and since it has been held that mere duplications of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

15. Davis, V. teaches wherein sharing the active secure communication session allows a single SSL session to be simultaneously shared by multiple servers, (e.g., col. 23, lines 10 – 43). It would have been obvious to one skilled in the art at the time the invention was made to combine the teaches of Davis, V. with the combine system of Devarakonda, Kunzelman, Davis and Haller because utilizing the same secure session between servers could allow the server to communicate without a client's intervention or ability to decrypt messages between servers. Also, utilizing the same communication session between servers could provide a faster session because of the lack of extra sessions to establish between servers.

16. Referencing claim 2, Devarakonda teaches attempting to retrieve the state information includes:

17. attempting to use the session identifier to identify the second server in the plurality of servers that has an active secure communication session with the client that corresponds to the session identifier, (e.g. col. 4, line 58 – col. 5, line 12 & col. 9, lines 5 – 32); and

18. attempting to retrieve the state information from the second server, (e.g. col. 4, line 58 – col. 5, line 12 & col. 9, lines 5 – 32).

19. Referencing claim 3, Devarakonda teaches attempting to retrieve the state information involves attempting to retrieve the state information from a centralized repository that is in communication with the plurality of servers, (e.g. col. 8, line 53 – col. 9, line 32).

20. Referencing claim 4, Devarakonda teaches the centralized repository includes a database for storing the state information, (e.g. col. 3, line 27 – col. 5, line 12 & col. 8, line 53 – col. 9, line 32).

21. Referencing claim 5, Devarakonda teaches establishing the active secure communication session involves establishing a secure sockets layer (SSL) connection with the client, (e.g. col. 3, lines 35 – 55).

22. Referencing claim 9, Devarakonda teaches initially establishing an active secure communication session between the client and the second server, the active secure communication session being identified by the session identifier, (e.g. col. 4, line 58 – col. 5, line 12 & col. 9, lines 5 – 32).

23. Claims 13 – 17, 21 and 25 – 29 are rejected for similar reasons as stated above.

24. Claims 6, 7, 10, 18, 19, 22, 30, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devarakonda, Kunzelman, Davis, Haller and Davis, V. as applied to claims 1, 13 and 25 above, and in further view of Fielder et al. (6105133) (hereinafter Fielder).

25. As per claim 6, Devarakonda teaches the state information includes:

26. a session encryption key for the secure communication session, (e.g. col. 3, lines 35 – 64);

27. the session identifier for the secure communication session, (e.g. col. 7, line 56 – col. 8, line 34). Devarakonda and Kunzelman do not teach a running message digest for the secure communication session. Fielder teaches a running message digest for the secure communication session, (e.g. col. 2, line 60 – col. 3, line 42). It would have been obvious to one skilled in the art at the time the invention was made to combine Fielder with the combine system of Devarakonda, Kunzelman, Davis, Haller and Davis, V. because it would make the transferring of information more secure because of the functionality of running message digest adding a signature to identify and authenticate the sender and message of the transferred information.

28. As per claim 7, Devarakonda, Kunzelman, Davis, Haller and Davis, V. do not teach using the message to update the running message digest; and

29. checkpointing the updated running message digest to a location outside of the first server. Fielder teaches using the message to update the running message digest, (e.g. col. 2, line 60 – col. 3, line 42); and

30. checkpointing the updated running message digest to a location outside of the first server, (e.g. col. 2, line 60 – col. 3, line 42). It would have been obvious to one skilled in the art at the time the invention was made to combine Fielder with the combine system of Devarakonda, Kunzelman, Davis, Haller and Davis, V. because it would be more efficient for the message to

update the running message digest so when a server with new information pertaining to state information occurs, the entire network will be able to access this information and utilize it in new secure data transfer, as appose to having to send a separate set of information to update the running message digest on each device, causing more traffic on the network.

31. As per claim 10, Devarakonda, Kunzelman, Davis, Haller and Davis, V. do not teach attempting to retrieve the state information includes authenticating and authorizing the first server. Fielder teaches attempting to retrieve the state information includes authenticating and authorizing the first server, (e.g. col. 1, lines 31 - 44). It would have been obvious to one skilled in the art at the time the invention was made to combine Fielder with the combine system of Devarakonda, Kunzelman, Davis, Haller and Davis, V. because it would make a system more secure if the receiver of the information could be authorized to the information by authenticating the information that was sent from the first server. Furthermore, it would make the information more difficult for other system to try and access the information without having the authentication and authorized access to the information.

32. Claims 18, 19, 22, 30, 31 and 33 are rejected for similar reasons as stated above.

33. Claims 8, 20 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devarakonda, Kunzelman, Davis, Haller and Davis, V. as applied to claims 1, 13 and 25 above, and in further view of Kennedy et al. (6134582).

34. As per claim 8, Devarakonda, Kunzelman, Davis, Haller and Davis, V. do not teach if the state information for the active secure communication session is retrieved, purging the state information from a location from which the state information was retrieved, so that the state information cannot be subsequently retrieved by another server in the plurality of servers. Kennedy teaches if the state information for the active secure communication session is retrieved, purging the state information from a location from which the state information was retrieved, so that the state information cannot be subsequently retrieved by another server in the plurality of servers, (e.g. col. 1, line 57 – col. 2, line 10). It would have been obvious to one skilled in the art at the time the invention was made to combine Kennedy with the combine system of Devarakonda, Kunzelman, Davis, Haller and Davis, V. because it would be more efficient for a system to free up space on a device that is no longer using that specific information on that particular device.

35. Claims 20 and 32 are rejected for similar reasons as stated above.

Response to Arguments

36. Applicant's other arguments with respect to claims 1 – 10, 13 – 22 and 25 – 33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

38. a. Brendel U.S. Patent No. 6772333 discloses Atomic session-start operation combining clear-text and encrypted sessions to provide id visibility to middleware such as load-balancers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England
Examiner
Art Unit 2143

De

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER